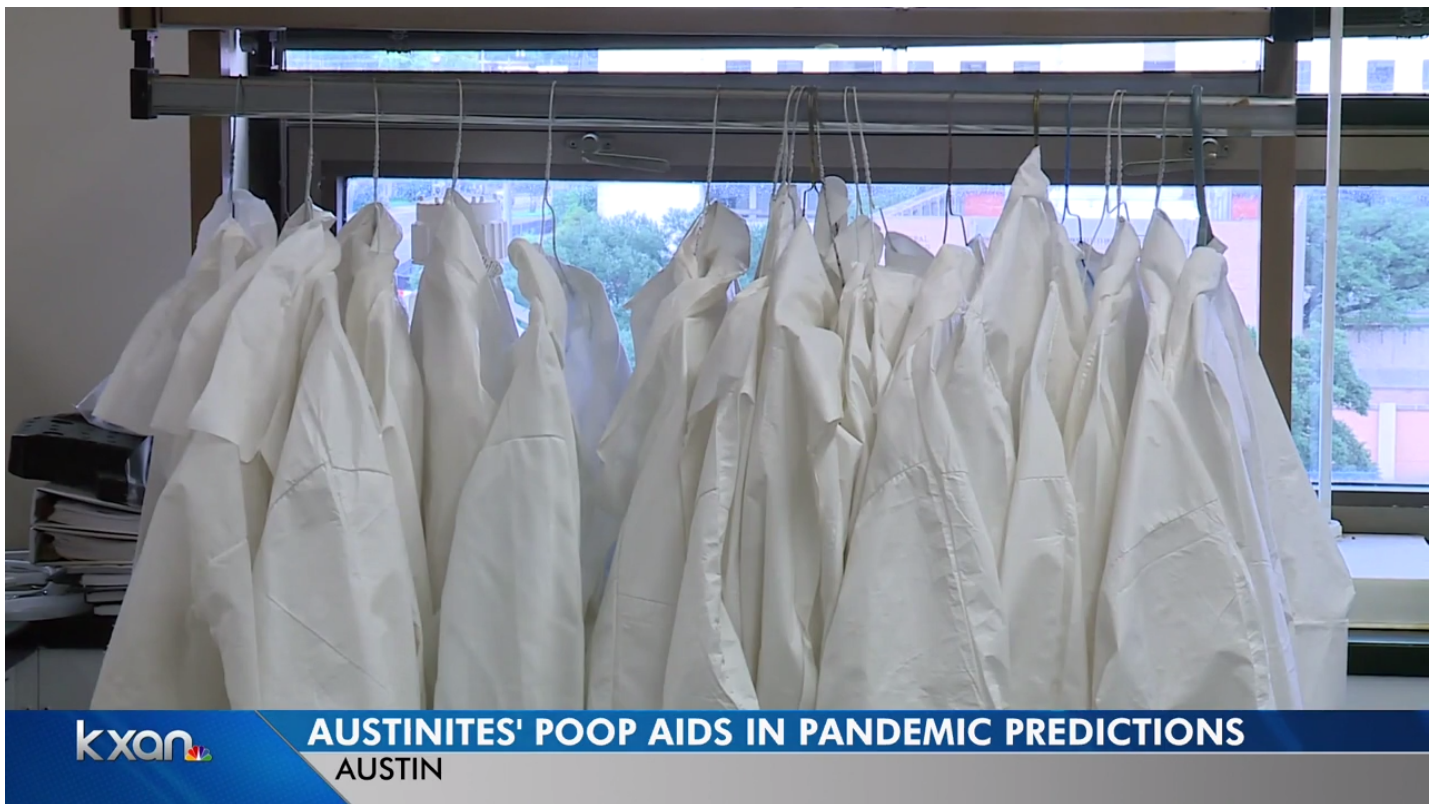


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AUSTIN

Your poop is helping predict COVID-19 outbreaks in Austin



by: [Jacquelyn Powell](#)

Posted: Sep 23, 2020 / 05:45 PM CDT / Updated: Sep 25, 2020 / 04:36 PM CDT

AUSTIN (KXAN) — The Cockrell School of Engineering at The University of Texas is testing wastewater samples across Austin to predict when cases of COVID-19 may be on the rise.

Professor Mary Jo Kirisits is leading a small team in the Cockrell School of Engineering that's taking wastewater treatment

that viral RNA shows up sooner after infection in feces than other testing methods and is also present before someone would begin showing symptoms, Kirisits says.

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Based upon fluctuations on the concentration of the virus found in wastewater, Kirisits and her team can make predictions that case numbers will soon be on the rise and warn city officials and medical providers in advance that they need to prepare for an influx of patients.

“If you can have a warning that an outbreak is coming, you can gear up your medical personnel and say, you know, ‘We can see that there’s this huge spike. They haven’t arrived in the hospital, yet, but get ready,’” Kirisits said.

It’s a technique that’s used in some countries to monitor polio outbreaks, Kirisits says. Since June, she and her team have been testing samples from Austin Water several times a week.

Kirisits says the higher the concentration of the coronavirus in one of the samples, the higher the likelihood that cases will be on the rise in the next few days to a week.

Kiristis says her team is beginning to test more localized samples in specific neighborhoods. Those samples are collected from manholes, so that the researchers can get a better idea of which parts of town have higher concentrations of the virus.

The team hopes to expand those efforts to neighborhoods citywide, but will need a source of funding to do so.

“If we see an uptick there, we can dedicate more educational resources or, like in the case of polio, what they do is they’ll say, ‘Well, this is where we really need to focus on vaccination of people,’” Kirisits said, adding that will be the next step, once a COVID-19 vaccination is developed.

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RICE UNIVERSITY IS WORKING ON A SIMILAR PROJECT WITH THE CITY OF HOUSTON.

It is growing in popularity among universities across the country. In August, the University of Arizona was able to use it to trace the virus to one of its dorms , then test those inside. Two asymptomatic students came up positive for the virus, and were able to be isolated before further spreading it.

LATEST ON CORONAVIRUS: Updates on COVID-19 in Austin, Texas, the United States and the world

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CORONAVIRUS IN TEXAS

**SUBMIT A TIP.
SHARE YOUR STORY.**

We know Texans are feeling the impact of the coronavirus in ways unlike any crisis in the state's history. That's why our investigators want to hear from you. To help us dig into the problems and solutions surrounding this pandemic, we're looking for tips related to several topics:

- Did you lose your job? [Explore our reporting on unemployment complaints.](#)
- Is your loved one in a nursing home? [See how we exposed problems there.](#)
- Are you a health care worker? Did you know someone who died after contracting the virus? Are you concerned about safety in your community? Have you experienced testing delays? [Check out our complete coverage and more.](#)

Tell us your story. We understand this may be a sensitive and private issue, so we will protect your identity if you request it.

Name *

First Name

Last Name

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example@example.com